

Remarks

Claims 1-19 were pending prior to the present amendments. Claims 1, 5-7, 9-10, 12, and 14-19 are amended to correct clerical and typographical errors. Claims 20-42 are newly presented to more particularly point out and distinctly claim Applicant's invention.

As required by the Examiner, the title is amended to correct a clerical error.

The Specification is amended to update the status of the patent applications to which the present application claims priority.

The Examiner objected to informalities in Claims 1, 7, 9, 10 and 14-16 and rejected Claims 7, 12 and 18-19 under 35 U.S.C. § 112, second paragraph, as being indefinite. As amended, the Examiner's objections and rejections are deemed overcome.

The Examiner rejected Claims 1-3, 8, 10-11 and 14-16 under 35 U.S.C. § 102(e) as being anticipated by U.S. Patent 5,781,156 ("Krasner"). Applicant respectfully traverses the Examiner's rejection. As amended, Claim 1 recites the interrogator determining a pseudorange associated with a correlation snapshot received from the transponder:

1. (Currently amended) A communications system for determining the position of an object, said system comprising:

an interrogator remote from the object and adapted to:

receive GPS signals from GPS satellites;

for one of the GPS satellites associated with the GPS signals, transmit pre-positioning data for the GPS satellite, including a pseudorandom noise (PRN) code number, a Doppler frequency offset and a code phase offset and a tracking signal including reference time and frequency information; and

determine a pseudorange associated a received correlation snapshot; and

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a transponder positioned on the object and adapted to:

receive the pre-positioning data and the tracking signal;

collect RF samples of the GPS signals;

correlate the RF samples of the GPS signals against replicas of a GPS signal based on the PRN code number, the Doppler frequency offset, and the code phase offset in the prepositioning data and the reference time and frequency information in the tracking signal to produce the correlation snapshot; and

transmit the correlation snapshot to the interrogator.

(emphasis added)

As explained in Applicant's Specification (e.g., at page 6, lines 14-19), by limiting processing in the transponder to collection of GPS signals and calculating correlations against code replicas of the GPS signals, thereby requiring calculations of pseudoranges corresponding to the correlation snapshots to the interrogator, division of processing between the transponder and the interrogator is achieved. In contrast, Krasner's system requires positions and pseudoranges to be computed on the mobile or remote unit (see Krasner's Figs. 1A and 1B, and the accompanying detailed description beginning at Krasner's col. 4, line 30 to col. 9, line 25). Thus, Applicant respectfully submits that Claim 1 and its dependent Claims 2-3 and 8 are each neither disclosed nor suggested by Krasner. Similarly, Claims 10 and 14 recite pseudorange determination for correlation snapshots to be performed in the interrogator. Thus, Claims 10 and 14 and their respective dependent Claims 11 and 15-16 are also neither disclosed nor suggested by Krasner. Accordingly, Claims 1-3, 8, 10-11 and 14-16 are believed allowable over Krasner. Reconsideration and allowance of these claims are requested.

The Examiner indicated allowable subject matter in Claims 4-7, 9, 12-13 and 17-19.

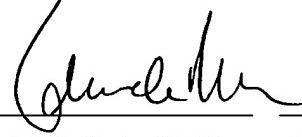
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Newly presented Claims 20-42, each reciting carrying out pseudorange determination at an interrogator from a correlation snapshot received from a remote transponder, are also believed allowable over Krasner.

For the above reasons, all pending claims (i.e., Claims 1-42) are believed allowable. Their allowance is therefore requested. If the Examiner has any question regarding the above, the Examiner is respectfully requested to telephone the undersigned Attorney for Applicant at (408)-392-9250.

I hereby certify that this correspondence is being deposited with the United States Postal Service as First Class Mail in an envelope addressed to: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450, on March 4, 2005.

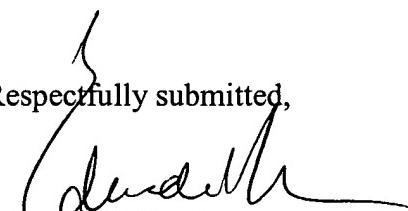
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